Better Trap Design Prevents Bed Bugs from Escaping

This new bed bug trap has design features that maintain the effectiveness of the trap for a long period of time. Revenues relating to bed bug treatment and control are in excess of $300 million in the United States alone and continue to grow. Because bed bugs have developed resistance to commonly used pesticides, another control option is to use traps. Unfortunately, both of the commonly used traps currently being sold rapidly lose trapping efficiency. One of these traps uses a talc coating to prevent bed bugs from escaping – until, that is, the talc dissipates or gets coated with debris. The other trap uses a sticky surface to trap the bugs, but the adhesive is prone to collecting dust and dirt which reduces trapping efficiency and allows bed bugs to escape. University of Florida researchers have designed a bed bug trap with smooth inner walls and an overhanging lip that keeps the trap debris-free and maintains its effectiveness for much longer periods.

Application
Traps bed bugs before they can climb the legs of furniture

Advantages
- Created with shortcomings of modern traps in mind, making this trap more effective than available solutions
- Designed to maintain the effectiveness many times longer than for currently available traps

Technology
This new bed bug trap has walls surrounding the pitfall area that are textured on the outside to allow bedbugs to crawl into the trap, but have smooth inner walls to prevent escape of trapped bugs. Additionally, there are overhanging lips on the inner and outer walls that further enhance long-term trapping efficiency. In one variation, the inner surfaces of the walls and overhanging lip can be coated with a pesticide. This simple, yet effective design makes it near impossible for bed bugs to escape the trap because they cannot scale a smooth vertical or overhanging surface. Furthermore, any debris or dust that falls into the trap won’t compromise trapping efficacy because the underside of the lip remains clean.
Inventors

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UF #15369 • Patent Pending